

SEP 20 2006

Applicant: Gorsuch et al.  
Application No.: 10/776,558**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-2 (Cancelled)

3. (Currently Amended) A code division multiple access (CDMA) user device comprising:

a CDMA transceiver; and

a controller operably connected to said the CDMA transceiver to;

~~communication session establishment software for establishing~~

establish a packet data communication session with a base station, the packet data communication session comprising a plurality of layers in accordance with a protocol architecture, the protocol architecture having a plurality of protocol layers including a physical layer;

~~bandwidth negotiation software for negotiating with the base station~~

an allocated bandwidth for wherein the controller is further operable in conjunction with said the CDMA transceiver to facilitate simultaneous use by the CDMA transceiver of a plurality of reverse traffic channels associated with the packet data communication session,

wherein each of the reverse traffic channels is associated with a CDMA code, and

Applicant: Gorsuch et al.  
Application No.: 10/776,558

~~physical layer connection software for establishing and releasing a physical layer connection between said CDMA transceiver and the base station; and state maintenance software for maintaining wherein~~ a state of at least one protocol layer above the other physical layer is maintained during the packet data communication session after termination of the physical layer plurality of traffic channels have been released.

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Currently Amended) A CDMA user device according to ~~Claim 8~~ claim 3, wherein ~~said bandwidth negotiation software comprises a routine that communicates a requested bandwidth~~ the controller is further operable in conjunction with the CDMA transceiver to communicate a need for a particular user data rate to the base station.

10. (Currently Amended) A CDMA user device according to Claim 3, wherein ~~said~~ the CDMA transceiver is operable to simultaneously transmits control, voice and data information to the base station.

Applicant: Gorsuch et al.  
Application No.: 10/776,558

11. (Currently Amended) A CDMA user device according to Claim 8 3, wherein ~~said~~ the CDMA transceiver is operable to simultaneously transmits control and data information to the base station on separate CDMA reverse traffic channels subchannels.

12. (Currently Amended) A CDMA user device according to Claim 3, further comprising a channel multiplexer for multiplexing user information over a plurality of CDMA reverse traffic channels subchannels.

13. (Currently Amended) A CDMA user device according to Claim 12, wherein the user information comprises voice and packet data.

14. (Currently Amended) A CDMA user device according to Claim 3, ~~further comprising a personal digital assistant (PDA) connected to said controller.~~ wherein at least two of the plurality of reverse traffic channels may have different bandwidths.

15. (Currently Amended) A code division multiple access (CDMA) user device comprising:

a CDMA transceiver; and

a controller operable with ~~connected to said~~ the CDMA transceiver ~~for~~ to establishing a packet data communication session with a base station, the communication session comprising a plurality of layers in accordance with a protocol architecture, the protocol architecture having a plurality of protocol layers including a physical layer; and

Applicant: Gorsuch et al.  
Application No.: 10/776,558

the controller operable with the CDMA transceiver to facilitate simultaneous use of a plurality of reverse traffic channels by the CDMA user device during the packet data communication session, wherein each of the reverse traffic channels is associated with a CDMA code and at least two of the plurality of reverse traffic channels have different bandwidths;

~~negotiating with the base station an allocated bandwidth for said CDMA transceiver,~~

~~establishing and releasing release the a physical layer connection between said CDMA transceiver and the base station, and~~

maintaining wherein a state of at least one other protocol layer other than the physical layer is maintained during the packet data communication session after termination of the physical layer plurality of traffic channels have been released.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Currently Amended) A CDMA user device according to Claim ~~20~~ 15, wherein ~~said the controller communicates~~ is further operable to communicate a

Applicant: Gorsuch et al.  
Application No.: 10/776,558

requested bandwidth for the packet data communication session to the base station.

22. (Currently Amended) A CDMA user device according to Claim 15, wherein ~~said~~ the CDMA transceiver is operable to simultaneously transmits control, voice and data information to the base station.

23. (Currently Amended) A CDMA user device according to Claim ~~22~~ 15, wherein ~~said~~ the CDMA transceiver is operable to simultaneously transmits control and data information to the base station on separate ones of the CDMA plurality of reverse traffic channels subchannels.

24. (Currently Amended) A CDMA user device according to Claim 15, further comprising a channel multiplexer for multiplexing user information over ~~a~~ the plurality of CDMA reverse traffic channels subchannels.

25. (Currently Amended) A CDMA user device according to Claim 24, wherein the ~~CDMA~~-user information comprises voice and data.

26. (Cancelled)

27. (Currently Amended) A code division multiple access (CDMA) user device comprising:

~~a personal digital assistant (PDA);~~

~~a controller connected to said PDA;~~

a CDMA transceiver operably connected to ~~said~~ the controller, the CDMA transceiver operable to simultaneously transmit packet data over a plurality

Applicant: Gorsuch et al.  
Application No.: 10/776,558

of traffic channels associated with a packet data communication session, wherein each of the reverse traffic channels is associated with a CDMA code and at least two of the plurality of traffic channels can have different bandwidths; and

~~bandwidth allocation software implementing a state machine including at least one state in which~~ wherein a status of at least one layer of a the packet data communication session above a physical layer of the packet data communication session is maintained upon termination of the physical layer release of the plurality of traffic channels.

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Previously Presented) A CDMA user device according to Claim 27, further comprising a data buffer.

32. (Currently Amended) A CDMA user device according to Claim 31, further comprising a monitor to detect a rate at which ~~said~~ the buffer is filled.

33. (New) The CDMA user device of claim 3 wherein the user device is a portable device comprising an integrated unit having a modem, the CDMA transceiver and the controller.

34. (New) The CDMA user device of claim 33 wherein the portable device

Applicant: Gorsuch et al.  
Application No.: 10/776,558

comprises a terminal equipment.

35. (New) The CDMA user device of claim 34 wherein the terminal equipment includes an application layer.

36. (New) The CDMA user device of claim 35 wherein the application layer is operable to run an internet application.

37. (New) The CDMA user device of claim 35 wherein the application layer is operable to download a web page.

38. (New) The CDMA user device of claim 33 wherein the CDMA transceiver is operable by the controller to transmit CDMA signals on a selected transmission frequency out of a plurality of potential transmission frequencies and to receive CDMA signals on a selected reception frequency out of a plurality of potential reception frequencies.

39. (New) The CDMA user device of claim 33 wherein the controller is operable to retrieve stored class of service information.

40. (New) The CDMA user device of claim 33 wherein the controller is operable to retrieve a stored maximum data rate associated with the user device.

41. (New) The CDMA user device of claim 3 wherein the controller is operable to assemble and buffer packet data for transmission over a traffic channel.

Applicant: Gorsuch et al.  
Application No.: 10/776,558

42. (New) The CDMA user device of claim 3 wherein the controller is operable to decide to request a supplemental reverse traffic channel based on an amount of data in a packet data queue.

43. (New) The CDMA user device of claim 42 wherein the controller is operable to decide to request the supplemental reverse traffic channel based on a priority of service of the packet data.

44. (New) The CDMA user device of claim 3 wherein the controller is operable to decide to request a supplementation reverse traffic channel based on a short term estimated data rate desired to transmit the packet data.

45. (New) The CDMA user device of claim 42 wherein the decision to request the supplemental reverse traffic channel is independent of an existing forward channel allocation.

46. (New) The CDMA user device of claim 15 wherein the user device is a portable device comprising an integrated unit having a modem, the CDMA transceiver and the controller.

47. (New) The CDMA user device of claim 46 wherein the portable device comprises a terminal equipment.

48. (New) The CDMA user device of claim 47 wherein the terminal equipment includes an application layer.



Applicant: Gorsuch et al.  
Application No.: 10/776,558

49. (New) The CDMA user device of claim 48 wherein the application layer is operable to run an internet application.

50. (New) The CDMA user device of claim 48 wherein the application layer is operable to download a web page.

51. (New) The CDMA user device of claim 46 wherein the CDMA transceiver is operable by the controller to transmit CDMA signals on a selected transmission frequency out of a plurality of potential transmission frequencies and to receive CDMA signals on a selected reception frequency out of a plurality of potential reception frequencies.

52. (New) The CDMA user device of claim 46 wherein the controller is operable to retrieve stored class of service information.

53. (New) The CDMA user device of claim 46 wherein the controller is operable to retrieve a stored maximum data rate associated with the user device.

54. (New) The CDMA user device of claim 15 wherein the controller is operable to assemble and buffer packet data for transmission over a traffic channel.

55. (New) The CDMA user device of claim 15 wherein the controller is operable to decide to request a supplemental reverse traffic channel based on an amount of data in a packet data queue.

56. (New) The CDMA user device of claim 55 wherein the controller is

- 10 -

Applicant: Gorsuch et al.  
Application No.: 10/776,558

operable to decide to request the supplemental reverse traffic channel based on a priority of service of the packet data.

57. (New) The CDMA user device of claim 15 wherein the controller is operable to decide to request a supplementation reverse traffic channel based on a short term estimated data rate desired to transmit the packet data.

58. (New) The CDMA user device of claim 55 wherein the decision to request the supplemental reverse traffic channel is independent of an existing forward channel allocation.

59. (New) The CDMA user device of claim 27 wherein the user device is a portable device comprising an integrated unit having a modem, the CDMA transceiver and the controller.

60. (New) The CDMA user device of claim 59 wherein the portable device comprises a terminal equipment.

61. (New) The CDMA user device of claim 60 wherein the terminal equipment includes an application layer.

62. (New) The CDMA user device of claim 61 wherein the application layer is operable to run an internet application.

63. (New) The CDMA user device of claim 61 wherein the application layer is operable to download a web page.

Applicant: Gorsuch et al.  
Application No.: 10/776,558

64. (New) The CDMA user device of claim 59 wherein the CDMA transceiver is operable by the controller to transmit CDMA signals on a selected transmission frequency out of a plurality of potential transmission frequencies and to receive CDMA signals on a selected reception frequency out of a plurality of potential reception frequencies.

65. (New) The CDMA user device of claim 59 wherein the controller is operable to retrieve stored class of service information.

66. (New) The CDMA user device of claim 59 wherein the controller is operable to retrieve a stored maximum data rate associated with the user device.

67. (New) The CDMA user device of claim 27 wherein the controller is operable to assemble and buffer packet data for transmission over a traffic channel.

68. (New) The CDMA user device of claim 27 wherein the controller is operable to decide to request a supplemental reverse traffic channel based on an amount of data in a packet data queue.

69. (New) The CDMA user device of claim 68 wherein the controller is operable to decide to request the supplemental reverse traffic channel based on a priority of service of the packet data.

70. (New) The CDMA user device of claim 27 wherein the controller is operable to decide to request a supplementation reverse traffic channel based on a

Applicant: Gorsuch et al.  
Application No.: 10/776,558

short term estimated data rate desired to transmit the packet data.

71. (New) The CDMA user device of claim 68 wherein the decision to request the supplemental reverse traffic channel is independent of an existing forward channel allocation.

72. (New) A wireless code division multiple access (CDMA) user device comprising:

a CDMA transceiver; and

a controller operable in conjunction with the CDMA transceiver such that the CDMA transceiver is operable to transmit packet data simultaneously over a plurality of reverse traffic channels and receive data over at least one forward traffic channel during a communication session between the user device and a base station,

wherein each of the reverse traffic channels and the forward traffic channel is associated with a CDMA code, and

wherein the controller is further operable to maintain the communication session when all of the traffic channels have been released.

73. (New) The CDMA user device of claim 72, wherein the communication session is associated with an upper layer protocol and the controller is further operable such that when all of the traffic channels have been released, the communication session can be maintained without having to re-initialize the upper layer protocol.

74. (New) The CDMA user device of claim 73, wherein the user device is

Applicant: Gorsuch et al.  
Application No.: 10/776,558

associated with a protocol architecture, the protocol architecture having at least a layer 1 and a layer 2, and wherein the upper layer protocol is a protocol associated with a protocol architecture layer above the layer 2.

75. (New) The CDMA user device of claim 73, wherein the upper layer protocol is a layer 3 protocol.

76. (New) The CDMA user device of claim 73, wherein the upper layer protocol is a network layer protocol.

77. (New) The CDMA user device of claim 73, wherein the upper layer protocol is an ISDN or other wireline digital protocol.

78. (New) The CDMA user device of claim 72, wherein the communication session is associated with one or more upper layer protocols and the controller is further operable such that when all of the traffic channels have been released, the communication session can be maintained without having to re-initialize any of the one or more upper layer protocols.

79. (New) The CDMA user device of claim 78, wherein the user device is associated with a protocol architecture, the protocol architecture having at least a layer 1 and a layer 2, and wherein the one or more upper layer protocols are protocols associated with a protocol architecture layer or layers above the layer 2.

80. (New) The CDMA user device of claim 78, wherein the one or more upper layer protocols are layer 3 protocols.

Applicant: Gorsuch et al.  
Application No.: 10/776,558

81. (New) The CDMA user device of claim 78, wherein the one or more upper layer protocols are ISDN or other wireline digital protocols.

82. (New) The CDMA user device of claim 72, wherein the communication session includes a network layer communication session.

83. (New) The CDMA user device of claim 72, wherein the communication session includes a layer 3 communication session.

84. (New) The CDMA user device of claim 72, wherein at least two of the plurality of reverse traffic channels have different bandwidths.

85. (New) The CDMA user device of claim 72, wherein the wireless CDMA user device is a portable wireless CDMA user device.

86. (New) The CDMA user device of claim 72, wherein the traffic channels are released upon expiration of a first predetermined period of time of packet data inactivity between the user device and the base station over the reverse traffic channels.

87. (New) The CDMA user device of claim 72, wherein the controller is further operable in conjunction with the CDMA transceiver to establish a supplemental reverse traffic channel during the communication session, the supplemental reverse traffic channel being supplemental to an existing reverse traffic channel.

Applicant: Gorsuch et al.  
Application No.: 10/776,558

88. (New) The CDMA user device of claim 86, wherein the controller is further operable in conjunction with the CDMA transceiver to establish a supplemental reverse traffic channel during the communication session, the supplemental reverse traffic channel being supplemental to an existing reverse traffic channel; and

wherein, once the supplemental reverse traffic channel is established, it is released upon expiration of a second predetermined period of time.

89. (New) The CDMA user device of claim 88, wherein the second predetermined period of time is determined by the user device.

90. (New) The CDMA user device of claim 88, further comprising a buffer, wherein the second predetermined period of time may be extended when packet data in the buffer exceeds a predetermined threshold.

91. (New) The CDMA user device of claim 86, further comprising a timer for determining when the first predetermined period of time has expired.

92. (New) The CDMA user device of claim 72 wherein the user device is a portable device comprising an integrated unit having a modem, the CDMA transceiver and the controller.

93. (New) The CDMA user device of claim 92 wherein the portable device comprises a terminal equipment.

Applicant: Gorsuch et al.  
Application No.: 10/776,558

94. (New) The CDMA user device of claim 93 wherein the terminal equipment includes an application layer.

95. (New) The CDMA user device of claim 94 wherein the application layer is operable to run an internet application.

96. (New) The CDMA user device of claim 94 wherein the application layer is operable to download a web page.

97. (New) The CDMA user device of claim 92 wherein the CDMA transceiver is operable by the controller to transmit CDMA signals on a selected transmission frequency out of a plurality of potential transmission frequencies and to receive CDMA signals on a selected reception frequency out of a plurality of potential reception frequencies.

98. (New) The CDMA user device of claim 92 wherein the controller is operable to retrieve stored class of service information.

99. (New) The CDMA user device of claim 92 wherein the controller is operable to retrieve a stored maximum data rate associated with the user device.

100. (New) The CDMA user device of claim 72 wherein the controller is operable to assemble and buffer packet data for transmission over a traffic channel.

101. (New) The CDMA user device of claim 72, wherein the controller is further operable in conjunction with the CDMA transceiver to transmit a request



Applicant: Gorsuch et al.  
Application No.: 10/776,558

for a supplemental reverse traffic channel, the supplemental reverse traffic channel being supplemental to an existing reverse traffic channel, from the user device to the base station over a previously established channel, the supplemental reverse traffic channel request indicating characteristics of the user device's supplemental reverse packet data traffic needs; and

wherein the controller is further operable in conjunction with the CDMA transceiver to receive supplemental reverse traffic channel assignment information from the base station in response to the request and to transmit packet data from the user device to the base station over the existing reverse traffic channel and the supplemental reverse traffic channel in accordance with the received supplemental reverse traffic channel assignment information.

102. (New) The CDMA user device of claim 101, wherein the previously established channel is a reverse control channel.

103. (New) The CDMA user device of claim 101, wherein the previously established channel is a reverse traffic channel.

104. (New) The CDMA user device of claim 101, wherein the previously established channel is the existing reverse traffic channel.

105. (New) The CDMA user device of claim 101, wherein the characteristics include a need for a particular user data rate.

106. (New) The CDMA user device of claim 101, wherein the controller is operable to repeat the supplemental reverse traffic channel request if the

Applicant: Gorsuch et al.  
Application No.: 10/776,558

supplemental reverse traffic channel assignment information is not received by the user device within a predetermined time.

107. (New) The CDMA user device of claim 101, wherein the supplemental reverse traffic channel is maintained so long as it is being utilized by the user device.

108. (New) The CDMA user device of claim 105, wherein the characteristics further include a duration providing an indication of how long the user data rate need requires the particular data rate.

109. (New) The CDMA user device of claim 101, wherein the characteristics include a duration for which the supplemental reverse traffic channel is required by the user device.

110. (New) The CDMA user device of claim 109, wherein the supplemental reverse traffic channel is maintained for the duration.

111. (New) The CDMA user device of claim 87, wherein the supplemental reverse traffic channel does not carry signaling or control traffic.

112. (New) The CDMA user device of claim 72, wherein the user device support simultaneous voice and packet data calls using different traffic channels.

113. (New) The CDMA user device of claim 72, wherein the controller is operable to maintain the communication session by maintaining a logical session

Applicant: Gorsuch et al.  
Application No.: 10/776,558

connection.

114. (New) The CDMA user device of claim 113, wherein the logical session connection is at a network layer protocol.

115. (New) The CDMA user device of claim 101 wherein the controller is operable to decide to request the supplemental reverse traffic channel based on an amount of data in a packet data queue.

116. (New) The CDMA user device of claim 115 wherein the controller is operable to decide to request the supplemental reverse traffic channel based on a priority of service of the packet data.

117. (New) The CDMA user device of claim 101 wherein the controller is operable to decide to request the supplementation reverse traffic channel based on a short term estimated data rate desired to transmit the packet data.

118. (New) The CDMA user device of claim 115 wherein the decision to request the supplemental reverse traffic channel is independent of an existing forward channel allocation.

119. (New) A wireless code division multiple access (CDMA) user device comprising:

a CDMA transceiver; and

a controller operable in conjunction with the CDMA transceiver such that the CDMA transceiver is operable to transmit packet data simultaneously over a

Applicant: Gorsuch et al.  
Application No.: 10/776,558

plurality of reverse traffic channels during a communication session, each of the reverse traffic channels being associated with a CDMA code and the plurality of reverse traffic channels including a primary reverse traffic channel and one or more supplemental reverse traffic channels,

wherein the controller is further operable to maintain the communication session when at least the primary reverse traffic channel and each of the supplemental reverse traffic channels have been released.

120. (New) The CDMA user device of claim 119, wherein the primary reverse traffic channel and each of the supplemental reverse traffic channels are released upon expiration of a first predetermined period of time of packet data inactivity between the user device and the base station over the primary reverse traffic channel and each of the supplemental reverse traffic channels.

121. (New) The CDMA user device of claim 119, wherein at least two of the plurality of reverse traffic channels may have different bandwidths.

122. (New) The CDMA user device of claim 119, wherein the controller is further operable in conjunction with the CDMA transceiver to transmit a supplemental reverse traffic channel request from the user device to the base station over a previously established channel, the supplemental reverse traffic channel request indicating characteristics of the user device's supplemental reverse packet data traffic needs; and

wherein the controller is further operable in conjunction with the CDMA transceiver to receive supplemental reverse traffic channel assignment information from the base station in response to the request and to transmit packet data from

Applicant: Gorsuch et al.  
Application No.: 10/776,558

the user device to the base station over the primary reverse traffic channel and the one or more supplemental reverse traffic channels in accordance with the received supplemental reverse traffic channel assignment information.

123. (New) The CDMA user device of claim 119 wherein the user device is a portable device comprising an integrated unit having a modem, the CDMA transceiver and the controller.

124. (New) The CDMA user device of claim 123 wherein the portable device comprises a terminal equipment.

125. (New) The CDMA user device of claim 124 wherein the terminal equipment includes an application layer.

126. (New) The CDMA user device of claim 125 wherein the application layer is operable to run an internet application.

127. (New) The CDMA user device of claim 125 wherein the application layer is operable to download a web page.

128. (New) The CDMA user device of claim 123 wherein the CDMA transceiver is operable by the controller to transmit CDMA signals on a selected transmission frequency out of a plurality of potential transmission frequencies and to receive CDMA signals on a selected reception frequency out of a plurality of potential reception frequencies.

Applicant: Gorsuch et al.  
Application No.: 10/776,558

129. (New) The CDMA user device of claim 123 wherein the controller is operable to retrieve stored class of service information.

130. (New) The CDMA user device of claim 123 wherein the controller is operable to retrieve a stored maximum data rate associated with the user device.

131. (New) The CDMA user device of claim 119 wherein the controller is operable to assemble and buffer packet data for transmission over a traffic channel.

132. (New) The CDMA user device of claim 119 wherein the controller is operable to decide to request a supplemental reverse traffic channel based on an amount of data in a packet data queue.

133. (New) The CDMA user device of claim 132 wherein the controller is operable to decide to request the supplemental reverse traffic channel based on a priority of service of the packet data.

134. (New) The CDMA user device of claim 119 wherein the controller is operable to decide to request a supplementation reverse traffic channel based on a short term estimated data rate desired to transmit the packet data.

135. (New) The CDMA user device of claim 132 wherein the decision to request the supplemental reverse traffic channel is independent of an existing forward channel allocation.

136. (New) A code division multiple access (CDMA) user device comprising:

- 23 -

Applicant: Gorsuch et al.  
Application No.: 10/776,558

a CDMA transceiver; and

a controller operable in conjunction with the CDMA transceiver such that the CDMA transceiver is operable to transmit packet data simultaneously over a plurality of reverse traffic channels and receive data over at least one forward traffic channel during a packet data communication session between the user device and a base station, the packet data communication session including a first time period during which packet data is transmitted or received by the user device, a second time period after the first time period during which no packet data is transmitted or received by the user device and during which all of the traffic channels have been released, and a third time period after the second time period during which packet data is transmitted or received by the user device,

wherein each of the reverse traffic channels and the forward traffic channel is associated with a CDMA code, and

wherein the packet data communication session is associated with an upper layer protocol and the controller is further operable to transmit or receive packet data during the third time period without having to re-initialize the upper layer protocol.

137. (New) The CDMA user device of claim 136, wherein the second period of time includes a predetermined period of time of packet data inactivity between the user device and the base station over the traffic channels wherein the traffic channels are released upon expiration of the predetermined period of time.

138. (New) The CDMA user device of claim 136, wherein the controller is further operable in conjunction with the CDMA transceiver to transmit a request for a supplemental reverse traffic channel, the supplemental reverse traffic channel

Applicant: Gorsuch et al.  
Application No.: 10/776,558

being supplemental to an existing reverse traffic channel, from the user device to the base station over a previously established channel, the supplemental reverse traffic channel request indicating characteristics of the user device's supplemental reverse packet data traffic needs; and

wherein the controller is further operable in conjunction with the CDMA transceiver to receive supplemental reverse traffic channel assignment information from the base station in response to the request and to transmit packet data from the user device to the base station over the existing reverse traffic channel and the supplemental reverse traffic channel in accordance with the received supplemental reverse traffic channel assignment information.

139. (New) The CDMA user device of claim 136, wherein at least two of the plurality of reverse traffic channels may have different bandwidths.

140. (New) The CDMA user device of claim 136 wherein the user device is a portable device comprising an integrated unit having a modem, the CDMA transceiver and the controller.

141. (New) The CDMA user device of claim 140 wherein the portable device comprises a terminal equipment.

142. (New) The CDMA user device of claim 141 wherein the terminal equipment includes an application layer.

143. (New) The CDMA user device of claim 142 wherein the application layer is operable to run an internet application.



Applicant: Gorsuch et al.  
Application No.: 10/776,558

144. (New) The CDMA user device of claim 142 wherein the application layer is operable to download a web page.

145. (New) The CDMA user device of claim 140 wherein the CDMA transceiver is operable by the controller to transmit CDMA signals on a selected transmission frequency out of a plurality of potential transmission frequencies and to receive CDMA signals on a selected reception frequency out of a plurality of potential reception frequencies.

146. (New) The CDMA user device of claim 140 wherein the controller is operable to retrieve stored class of service information.

147. (New) The CDMA user device of claim 140 wherein the controller is operable to retrieve a stored maximum data rate associated with the user device.

148. (New) The CDMA user device of claim 136 wherein the controller is operable to assemble and buffer packet data for transmission over a traffic channel.

149. (New) The CDMA user device of claim 136 wherein the controller is operable to decide to request a supplemental reverse traffic channel based on an amount of data in a packet data queue.

150. (New) The CDMA user device of claim 149 wherein the controller is operable to decide to request the supplemental reverse traffic channel based on a priority of service of the packet data.

Applicant: Gorsuch et al.  
Application No.: 10/776,558

151. (New) The CDMA user device of claim 136 wherein the controller is operable to decide to request the supplementation reverse traffic channel based on a short term estimated data rate desired to transmit the packet data.

152. (New) The CDMA user device of claim 149 wherein the decision to request a supplemental reverse traffic channel is independent of an existing forward channel allocation.

153. (New) A code division multiple access (CDMA) base station comprising:

a CDMA transceiver; and

a controller operably connected to the CDMA transceiver to establish a packet data communication session with a user device;

wherein the controller is further operable in conjunction with the CDMA transceiver to allocate for simultaneous use by the user device a plurality of traffic channels associated with the packet data communication session; and

wherein the packet data communication session is maintained after the plurality of traffic channels allocated to the user device have been released.

154. (New) The CDMA base station of claim 75, wherein at least two of the plurality of traffic channels may have different bandwidths.

155. (New) A wireless code division multiple access (CDMA) base station comprising:

a CDMA transceiver; and

Applicant: Gorsuch et al.  
Application No.: 10/776,558

a controller operable in conjunction with the CDMA transceiver such that the CDMA transceiver is operable to receive packet data simultaneously over a plurality of reverse traffic channels and transmit data over at least one forward traffic channel, the reverse traffic channels and the at least one forward traffic channel being associated with a packet data communication session between the base station and a user device, the packet data communication session including a first time period during which packet data is transmitted or received between the base station and the user device, a second time period after the first time period during which no packet data is transmitted or received between the base station and the user device and during which all of the traffic channels associated with the communication session have been released, and a third time period after the second time period during which packet data is transmitted or received between the base station and the user device,

wherein each of the reverse traffic channels and the forward traffic channel is associated with a CDMA code, and

wherein the packet data communication session is associated with an upper layer protocol and the controller is further operable to receive packet data during the third time period without the user device having to re-initialize the upper layer protocol.

156. (New) The CDMA base station of claim 155, wherein at least two of the plurality of reverse traffic channels may have different bandwidths.

157. (New) A wireless code division multiple access (CDMA) user device comprising:

a CDMA transceiver; and

Applicant: Gorsuch et al.  
Application No.: 10/776,558

a controller operable in conjunction with the CDMA transceiver such that the CDMA transceiver is operable to transmit packet data simultaneously over a plurality of reverse traffic channels and receive data over at least one forward traffic channel during a communication session between the user device and a base station,

wherein each of the reverse traffic channels and the forward traffic channel is associated with a CDMA code,

wherein the plurality of reverse traffic channels includes a primary reverse traffic channel and one or more supplemental reverse traffic channels, wherein the one or more supplemental reverse traffic channels are requested by the user device in accordance with the user device's supplemental reverse packet data traffic needs, and

wherein the controller is further operable to release all of the reverse traffic channels upon expiration of a predetermined time of packet data inactivity between the user device and the base station while maintaining the communication session between the user device and the base station, the predetermined time being determined by the user device.

158. (New) The CDMA user device of claim 157 wherein the user device is a portable device comprising an integrated unit having a modem, the CDMA transceiver and the controller.

159. (New) The CDMA user device of claim 158 wherein the portable device comprises a terminal equipment.

160. (New) The CDMA user device of claim 159 wherein the terminal

Applicant: Gorsuch et al.  
Application No.: 10/776,558

equipment includes an application layer.

161. (New) The CDMA user device of claim 160 wherein the application layer is operable to run an internet application.

162. (New) The CDMA user device of claim 160 wherein the application layer is operable to download a web page.

163. (New) The CDMA user device of claim 158 wherein the CDMA transceiver is operable by the controller to transmit CDMA signals on a selected transmission frequency out of a plurality of potential transmission frequencies and to receive CDMA signals on a selected reception frequency out of a plurality of potential reception frequencies.

164. (New) The CDMA user device of claim 158 wherein the controller is operable to retrieve stored class of service information.

165. (New) The CDMA user device of claim 158 wherein the controller is operable to retrieve a stored maximum data rate associated with the user device.

166. (New) The CDMA user device of claim 157 wherein the controller is operable to assemble and buffer packet data for transmission over a traffic channel.

167. (New) The CDMA user device of claim 157 wherein the controller is operable to decide to request a supplemental reverse traffic channel based on an amount of data in a packet data queue.

Applicant: Gorsuch et al.  
Application No.: 10/776,558

168. (New) The CDMA user device of claim 167 wherein the controller is operable to decide to request the supplemental reverse traffic channel based on a priority of service of the packet data.

169. (New) The CDMA user device of claim 157 wherein the controller is operable to decide to request a supplementation reverse traffic channel based on a short term estimated data rate desired to transmit the packet data.

170. (New) The CDMA user device of claim 167 wherein the decision to request the supplemental reverse traffic channel is independent of an existing forward channel allocation.